

### 3.13 SOCIOECONOMICS

This section presents the existing socioeconomic conditions in the vicinity of the Plymouth Generating Facility (PGF) and assesses the socioeconomic impacts that would result attributable to PGF construction and operation. Although the Washington State Environmental Policy Act (SEPA) does not require the assessment of economic impacts, it does state that an EIS should assess significant environmental effects on housing, physical blight<sup>1</sup>, and significant impacts of project-related population increases on environmental resources. Since the National Environmental Policy Act (NEPA) requires assessment of economic and social impacts, areas addressed in this section include labor force, employment, and income; population and housing; and public finance and fiscal issues, in compliance with both SEPA and NEPA.

On a regional level, the socioeconomic impact assessment presents existing conditions information for and analyzes impacts on Franklin and Benton Counties in Washington and Umatilla County in Oregon. Specific socioeconomic characteristics and impacts are also discussed in relation to the site area, the plant site, and the infrastructure corridors.

This section also addresses environmental justice issues in relation to the PGF. Executive Order 12898 (1994) requires that federal agencies address high and disproportionate environmental impacts on minority and low-income populations. Environmental justice issues are addressed for the PGF because transmission would be accomplished through the use of BPA transmission lines. Environmental justice impacts would result if (1) a minority or low-income population were present in the affected area of the PGF, and (2) environmental impacts from the PGF were considered high<sup>2</sup> and would fall disproportionately on the minority or low income populations. The first step of an environmental justice analysis involves a screening analysis to determine if environmental justice populations exist in the site area (see Section 3.13.1.3.1). The second step is to determine whether PGF impacts would be high and disproportionately affect any environmental justice populations (see Section 3.13.2 Environmental Consequences, Environmental Justice).

#### 3.13.1 AFFECTED ENVIRONMENT

##### 3.13.1.1 Regional Area

###### 3.13.1.1.1 *Economy: Labor Force, Employment, and Income*

###### **Labor Force**

The proposed plant site is located in unincorporated Benton County, Washington, approximately 0.75 mile north of the Columbia River shoreline and 2 miles west of the unincorporated community of Plymouth. The Columbia River is the border between Washington and Oregon.

The Tri-Cities metropolitan area is located approximately 25 miles north of the plant site within Benton and Franklin counties and includes the cities of Kennewick, Richland, and Pasco. Kennewick is approximately 22 miles north of the plant site. Although the Tri-Cities economy

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<sup>1</sup> Blight is defined as a "deteriorated condition" (Merriam-Webster 2002).

<sup>2</sup> For the purposes of this analysis, high impacts are considered significant impacts.

was originally based on fur trading, trapping, and steamship transportation that served the ranching and gold mining industries, agriculture and farming gained importance in tandem with irrigation, roads, railroad, and McNary Dam construction. The agriculture, food-processing, and agri-chemical industries were the primary factors in the Tri-Cities economic development (CFN 2001a).

A naval air station and a plutonium production center (nuclear plant) built in the Tri-Cities during World War II resulted in related government employment and an increase in local population. In 1988, the nuclear plant closed and became a research center for applying nuclear energy to non-military purposes, named the U.S. Department of Energy Hanford Site (Hanford). Due to the Washington State Public Power Supply System's construction of one of three planned nuclear reactors at Hanford in the 1970s and 1980s, local construction employment and payrolls increased (CFN 2001a).

Today, the Tri-Cities is a trade center for eastern Washington-grown crop processing and shipping, and includes a port system on the Columbia-Snake River system. Although services, retail trade, and government are currently the sectors with the highest employment, agriculture represents 8 percent and 24 percent of the employment in Benton and Franklin Counties, respectively (WESD 2001).

Due to nuclear power production, manufacturing, and research and development activities that occur and have occurred at Hanford, the area's labor force includes a relatively large engineering and scientific labor pool, along with other skilled and unskilled labor (CFN 2001b).

As presented in Table 3.13-1, the three-county area had a combined labor force of approximately 130,380 in 2000. Although both Washington's and Oregon's labor force growth slowed in the latter half of the 1990s compared to the first half, labor force growth slowed even more in the combined three-county area. The labor force growth rate in the three-county area was higher than both states' labor force growth rates between 1990 and 1995, and was lower than both states' rates between 1995 and 2000. The exception to this slowing trend is that Umatilla County had a lower rate of growth between 1990 and 1995 when compared to the three-county area and to Oregon, but experienced an increase in its labor force growth rate between 1995 and 2000.

**Table 3.13-1**  
**Labor Force – Benton, Franklin, and Umatilla Counties**

Year(s)	Benton County	Franklin County	Umatilla County	Three-county Total	State of Washington	State of Oregon
1990	60,700	19,100	29,780	109,580	2,538,000	1,491,000
1995	71,600	22,500	32,540	126,640	2,810,000	1,652,700
1996	71,000	22,600	33,260	126,860	2,879,000	1,717,600
1997	70,900	22,700	33,500	127,100	2,982,000	1,727,700
1998	71,300	22,900	33,300	127,500	3,038,000	1,765,000
1999	71,800	23,000	36,430	131,230	3,075,000	1,797,900
2000	71,800	22,700	35,880	130,380	3,045,000	1,781,300
AARG, 1990-1995	3.6%	3.6%	1.9%	3.1%	2.1%	2.2%
AARG, 1995-2000	0.1%	0.2%	2.1%	0.6%	1.7%	1.6%

Notes: AARG = annual average rate of growth

Source: WESD 2001; OED 2001a.

Umatilla County's economy is based on agriculture, food processing, forest products, tourism, manufacturing, recreation, aggregate production, and power generation. More specifically, fruit, grain, timber, cattle, and sheep are produced in Umatilla County. Key aspects of the County's economy and lifestyle include recreation, especially in the Blue Mountains, and tourism, in particular the annual Pendleton Round-Up rodeo (Umatilla County 2001). The cities of Pendleton and Hermiston, which are economic activity areas in Umatilla County, are located approximately 40 and 12 miles south of the plant site, respectively.

Because of the importance of agricultural activities as well as some tourism use reflected in trade and services industries in the three counties, a portion of local employment is seasonal. The unemployment rate can therefore fluctuate during the year, depending on timing of the farming and tourist season. As presented in Table 3.13-2, average annual unemployment rates in the three counties are typically higher than Oregon and Washington rates. Benton County has had the lowest unemployment rate of the three counties in the past few years (1997 to 2000).

**Table 3.13-2**  
**Unemployment Rate – Benton, Franklin, and Umatilla Counties**

Year	Benton County	Franklin County	Umatilla County	Three-County Average	State of Washington	State of Oregon
1990	6.10%	9.90%	8.30%	8%	4.9%	5.5%
1995	7.50%	9.80%	6.90%	9%	6.4%	4.8%
1996	8.50%	11.90%	8.40%	10%	6.5%	5.9%
1997	6.60%	9.30%	8.00%	8%	4.8%	5.8%
1998	6.60%	10.00%	11.00%	8%	4.8%	5.6%
1999	5.60%	9.60%	6.80%	8%	4.7%	5.7%
2000	6.40%	9.50%	6.90%	8%	5.2%	4.9%

Source: WESD 2001; OED 2001a.

## **Employment**

### *Industry Employment*

In 2000, the main industries in Benton, Franklin, and Umatilla counties combined were services (24 percent of total employment), retail trade (18 percent), and government (17 percent). Only in Franklin County did agriculture comprise over 10 percent of the total county employment.

In Benton County, the industries with the highest employment in 2000 were services (27 percent), retail trade (18 percent), and government (16 percent). In Franklin County they were agriculture, forestry, and fishing (24 percent); services (20 percent); and government (19 percent). In Umatilla County, industries with the most employment in 2000 were services (20 percent), government (20 percent), and retail trade (20 percent), similar to Benton County (see Table 3.12-3; WESD 2001; OED 2001a).

**Table 3.13-3  
2000 Employment by Industry**

Sector	Benton County	Franklin County	Umatilla County	State of Washington	State of Oregon
Agriculture, Forestry, Fishing	5,087	5,172	2,499	91,530	47,993
Mining	7	26	*	3,473	1,899
Construction	2,693	1,126	1,594	149,317	84,247
Manufacturing	4,433	1,555	4,359	345,830	242,935
Transportation, Public Utilities	7,904	815	1,344	139,684	77,307
Wholesale Trade	1,206	1,482	1,101	150,196	94,051
Retail Trade	11,560	2,768	5,787	483,740	300,794
Finance, Insurance, Real Estate	1,936	310	731	133,937	83,078
Services	17,215	4,394	5,722	747,048	429,857
Government	9,813	4,057	5818	458,482	244,747
Not Elsewhere Classified	1,213	0	9	0	1,003
Total	63,067	21,705	28,964	2,703,237	1,607,911

Notes: \* = Mining employment is not available for Umatilla County.

Source: WESD 2001; OED 2001.

In terms of industry employment, areas of change during the first half of the 1990s included decreases in manufacturing employment and increases in services employment in Benton and Franklin Counties. All industries in these two counties exhibited positive growth with the exception of manufacturing. In Umatilla County and Oregon as a whole, services, construction, and mining employment increased approximately 6 percent per year on average, while other industries, including manufacturing, also had positive growth rates (see Table 3.13-4).

**Table 3.13-4  
Industry Employment Trends**

Area	Construction, Mining <sup>1</sup>	Manufacturing	Transportation, Public Utilities	Trade	Finance, Insurance, Real Estate	Services	Government
<b>Percentage Change in Employment, 1990-1995</b>							
Benton	4%	-11%	2%	4%	6%	15%	4%
Franklin	4%	-11%	2%	4%	6%	15%	4%
Umatilla	6%	1%	2%	2%	3%	7%	0%
Washington	1%	-2%	1%	2%	1%	5%	2%
Oregon	6%	1%	3%	3%	3%	5%	1%
<b>Percentage Change in Employment, 1995-2000</b>							
Benton	0%	1%	43% <sup>2</sup>	3%	0%	-4%	1%
Franklin	0%	1%	43% <sup>2</sup>	3%	0%	-4%	1%
Umatilla	22%	-2%	7%	5%	1%	5%	4%
Washington	6%	1%	4%	3%	3%	5%	2%
Oregon	5%	1%	3%	2%	2%	4%	2%

<sup>1</sup> Since mining employment is not available for Umatilla County, the employment change in the "Construction, Mining" category for Umatilla County represents only construction.

<sup>2</sup> Table 3.13-4 shows very large annual average increases in Transportation and Public Utilities because, during this period, the state of Washington reassigned Hanford employment to this category. Hanford employment had previously been classified under Manufacturing (plutonium production) before the Hanford activities were switched to environmental clean-up (Schau, 2002).

Source: WESD 2001; OED 2001a.

During the latter half of the 1990s, Umatilla County experienced a surge in construction employment of approximately 22 percent per year, which is consistent with the relatively large number of newly constructed projects in Umatilla County. Manufacturing decreases occurred in Umatilla County as well, although they still did not occur in Oregon as a whole. Benton and Franklin Counties experienced large average increases in transportation and public utilities, and small decreases in services (see Table 3.13-4).

### **Employment Projections**

As presented in Table 3.13-5, Washington's Employment Security Department anticipates that the Benton-Franklin County area average employment growth rate, based on type of occupation, will be approximately 1.2 percent per year between 2000 and 2008, lower than the rate for Washington (1.6 percent) (WESD 2002a). Umatilla and Morrow Counties<sup>3</sup> non-farm employment growth rate will be approximately 0.5 percent per year, on average between 2000 and 2010, compared to 1.2 percent for Oregon (OED 2001b).

**Table 3.13-5  
Employment Trends and Projections**

<b>Area</b>	<b>2000 Projected Employment</b>	<b>2008 Projected Employment</b>	<b>2010 Projected Employment</b>	<b>AARG, 2000-2008</b>	<b>AARG, 2000-2010</b>
Benton and Franklin counties combined	94,822	104,088	-	1.2%	-
Umatilla and Morrow counties combined	32,134	-	33,720	-	0.5%
Washington State	3,154,747	3,563,844	-	1.6%	-
Oregon State	1,607,911	-	1,803,000	-	1.2%

Notes:

AARG = annual average rate of growth

Source: WESD 2002a; OED 2001b.

### **Construction Employment**

Employment in the construction industry is over 5,000 people in the three-county area. In 2000, approximately 2,693 people and 1,126 people were employed in the construction industry in Benton County and in Franklin County, respectively. In Umatilla County, approximately 1,400 were employed in construction and mining in January 2002 (WESD 2001; OED 2001).

Washington's Employment Security Department estimates approximately 4,000 people were employed in the construction industry in 2000 in the Tri-Cities area. Specifically, 456 were employed in the following construction trades: managers, trades workers, building inspectors, and extractive workers. An additional 469 workers are expected by 2002 (WESD 2002b). The Oregon Employment Department anticipates that in Umatilla County and Morrow Counties combined, construction and mining employment will decrease 16 percent between 2000 and 2010 (OED 2001b).

<sup>3</sup> Oregon Employment Department presents employment projections and other economic information for Umatilla and Morrow Counties combined. Morrow County is located directly west of Umatilla County.

## Income

As shown in Table 3.13-6, the three counties' measures of per capita income have been consistently lower than their respective state averages for the years 1990 and 1995 through 1999. Growth rates in all three counties were higher between 1990 and 1995 than between 1995 and 1999. For the Washington counties, this decrease in the latter part of the decade was opposite from the state's growth—Washington's growth rate in per capita income was approximately three percentage points higher in the first half of the decade than in the second half. In Oregon, the growth rate in per capita income decreased between the same two periods, but only slightly.

**Table 3.13-6  
2000 Per Capita Income**

Area	1990	1995	1996	1997	1998	1999	AARG, 1990-1995	AARG, 1995-1999
Benton County	17,940	22,618	22,804	23,287	24,158	25,004	5.2%	2.6%
Franklin County	14,300	16,882	18,163	18,148	18,051	17,961	3.6%	1.6%
Umatilla County	14,631	18,507	18,824	20,013	21,106	22,024	5.3%	4.8%
Washington State	20,026	23,878	25,287	26,802	28,579	30,380	3.8%	6.8%
Oregon State	18,253	22,668	23,649	24,844	25,996	26,958	4.8%	4.7%

Source: WESD 2001; OED 2001.

### 3.13.1.1.2 Population and Housing

#### Population

Population in the three-county area is concentrated in the Tri-Cities area. However, the portion of the population in each of the three counties that lives in unincorporated areas is approximately one-quarter to one-third of each county's total population. Following the Tri-Cities, the largest cities in the three-county area are Pendleton and Hermiston in Umatilla County, Oregon, as shown in Table 3.13-7.

Population in the three-county area grew faster in the 1990s than in the 1980s, as shown in Table 3.13-8. Franklin County experienced strong growth during the period 1990 to 1995, while all areas' population growth rates declined in the latter half of the 1990s when compared to the first half. Benton and Franklin Counties' growth rates were higher than that of Washington during the 1990s, while Umatilla County's growth rate was consistent with or slightly lower than Oregon's overall growth rate during the same period. Population in Benton County is expected to grow 1.3 percent per year between 2000 and 2010 (WOFM 2002b).

#### Housing

The three-county area had approximately 99,700 housing units in 2000, as shown in Table 3.13-9 (U.S. Census 2001). The number of housing units in each of the three counties comprised less than 3 percent of the total number of housing units in their respective states. The vacancy rates for the three counties ranged from 5.5 percent in Benton County to 9.0 percent in Umatilla County. While Umatilla County's rate was slightly higher than Oregon's rate and Franklin County's rate was higher than Washington's rate, Benton County's rate was lower than Washington's rate.

**Table 3.13-7  
Population 2001**

Area	Population
Benton County:	144,800
Benton City	2,720
Kennewick	55,780
Prosser	4,865
Richland	39,350
West Richland	8,735
Unincorporated	33,350
Franklin County:	50,400
Connell	2,970
Kahlotus	215
Mesa	440
Pasco	33,010
Unincorporated	13,765
Umatilla County:	70,900
Adams	310
Athena	1,270
Echo	670
Helix	180
Hermiston	13,560
Milton-Freewater	6,560
Pendleton	16,600
Pilot Rock	1,540
Stanfield	1,980
Ukiah	260
Umatilla	5,750
Weston	720
Unincorporated	21,500

Source: WOFM 2001; PSU 2001.

**Table 3.13-8  
Population Growth, 1980 through 2001**

Area	1980	1990	1995	2001	AARG, 1980-1990	AARG, 1990-1995	AARG, 1995-2001
Benton County	109,444	112,560	130,266	144,800	0.3%	3.1%	1.9%
Franklin County	35,025	37,473	45,756	50,400	0.7%	4.4%	1.7%
Umatilla County	58,861	59,249	65,200	70,900	0.1%	2.0%	1.5%
Washington State	4,132,156	4,866,692	5,470,104	5,974,900	1.8%	2.5%	1.5%
Oregon State	2,633,105	2,842,321	3,132,000	3,471,700	0.8%	2.0%	1.8%

Source: WOFM 2002a; Timmermans 2002.

**Table 3.13-9  
Housing, 2000**

Area	Number of Housing Units, 2000	Vacancy Rate	Percent of State
Benton County	55,963	5.5	2.3% (WA)
Franklin County	16,084	7.7	0.7% (WA)
Umatilla County	27,676	9.0	1.9% (OR)
Three-County Area	99,723	7.4	-
Washington State	2,451,075	7.3	-
Oregon State	1,452,709	8.2	-

Source: Census, 2001.

### Temporary Housing Facilities

Temporary lodging in the area includes hotels, motels, and recreational vehicle (RV) parks in Umatilla and Hermiston. As shown in Table 3.13-10, 190 hotel or motel rooms are located between 6 and 8 miles southwest of the plant site, and another 340 hotel/motel rooms and 57 RV spaces are located in Hermiston, between 12 and 14 miles from the plant site. The Tri-Cities' 31 hotels, some of which are large chain hotels, are located approximately 25 miles north of the plant site, and Pendleton's 1,100 hotel or motel rooms or RV spaces (285 RV spaces) are located approximately 40 miles south of the plant site.

**Table 3.13-10  
Temporary Lodging Facilities Near Plant Site**

Location	Name	Miles from Plant Site	Number of Rooms/RV Spaces
Umatilla	Rest-a-Bit Motel	6	36
	Tillicum Motor Inn	6	80
	Lamplighter Motel	7	7
	Desert River Inn	8	67
Hermiston	Oxford Inn	12	90
	Oxford Suites	12	127
	Economy Inn of Hermiston	12	39
	Way Inn	12	30
	Hat Rock Campground <sup>1</sup>	12	57
	Best Western Hermiston Inn	14	54

<sup>1</sup>Indicates RV park.

Source: HCC 2001; TCVCB 2001; URS 2001

#### 3.13.1.1.3 Public Finance and Fiscal Issues

The plant site is located within unincorporated Benton County. The current expense fund in Benton County in 2002 had total revenues of \$31.6 million and total expenditures of \$31.9 million. The difference was taken from the beginning balance of \$6.3 million. Total real and personal property tax revenue within the current expense fund was \$11.3 million. The 2002 consolidated budget for Benton County is \$164.8 million.

Total property tax revenue in 2001 in all funds was \$106.1 million (Mercer 2002). The average property tax rate for Benton County was \$14.04 per \$1,000 of assessed valuation, which does not include city levy rates. The plant site is located on four parcels within the same Tax Code Area (no. 1716), the levy rates and distributions for which are shown in Table 3.13-11.

**Table 3.13-11**  
**Property Tax Rates By Taxing District**  
**for Tax Code Area 1716 (Location of Plant Site)**

<b>Fund</b>	<b>Rate Per \$1,000 Assessed Valuation</b>	<b>Percent of Total</b>
State	3.03309135	19
County	1.54738651	10
County Road	1.86834118	12
Local Schools	6.07629531	39
Library	0.49620533	3
Fire District #6	1.24570556	8
Port of Benton	0.53278170	3
Prosser Hospital	0.86869091	6
Total	15.66849785	100

Source: Mercer 2002.

### **3.13.1.2 Site Area**

#### **3.13.1.2.1 Economy**

The plant site is located on industrially zoned land formerly used for orchard crops (see Figure 3.8-2 in Section 3.8 Land Use). The Williams Northwest Gas Pipeline Company (Williams Co.) employs 17 people at the liquid natural gas (LNG) storage facility and compressor station directly south of the plant site.

AgriNorthwest employs 160 to 500 people in the Plymouth area, depending on the requirement for seasonal workers. AgriNorthwest operates corn dryers and storage, a corn-growing research greenhouse, miscellaneous farm buildings, equipment and storage, and a rail load/off-load facility on their property located north and northeast of the plant site. AgriNorthwest employs 6 to 8 people at their Plymouth grain facility. Some trailers and small buildings belonging to AgriNorthwest are located approximately 0.75 mile to the east of the plant site.

Other employers near the plant site include the Columbia Crest Winery, which employs approximately 440 full-time and part-time employees (Hines 2002) and is located approximately 12 miles northwest of the plant site just north of Paterson, Washington. Watts Brothers Frozen Foods is located along SR 14 approximately 6 miles northwest of the site and employs between 30 to 150 people at that location depending on the season. Watts Brothers also operates WB Fertilizer (13 employees) and 100 Circles Farm (30 to 250 employees) in Paterson (Gonzales 2002; West 2002; McAllister 2002). A resident to the southwest of the plant site operates a farm (Emmanuel Farms) that is partially organic.

Businesses in the community of Plymouth, approximately 2 miles west of the plant site, include Sunrise Transport Company, Plymouth Tavern, and Court Street Realty<sup>4</sup>. Burlington Northern Santa Fe (BNSF) operates a railway (freight only) that runs within approximately 1,000 feet of the southeast corner of the plant site. The railway extends from the southwest, from along the Columbia River, passes by the plant site at the southeast corner, and continues in a northeasterly direction. WSDOT operates a quarry and storage for road materials northeast of the plant site.

Future business and economic uses in the site area could include heavy industrial use by potential buyer(s) of approximately 265 acres of Port of Kennewick property, located north and south of Christy Road, and west of Plymouth (Kinney 2002). In addition, future commercial uses, including a possible truck stop, could be constructed north of SR 14, west and east of Plymouth Road (Taylor 2002).

#### **3.13.1.2.2 Population and Housing**

Based on a site reconnaissance and review of aerial photographs, it was determined that approximately 70 homes are located in the community of Plymouth, all of which are located approximately 1.5 to 2.5 miles east of the plant site. The westernmost home in Plymouth is located approximately 1.5 miles east of the plant site. An estimated 175 people live in Plymouth.<sup>5</sup>

The residence closest to the plant site (Residence 1 on Figure 3.9-1 in Section 3.9, Visual Air Resources) is located approximately 0.25 mile northwest of the site on Plymouth Farm property, and is occupied by the Plymouth Farm manager. Residences to the southwest of the plant site include Residence 2 (occupied by a Plymouth Farm employee) located 0.75 mile southwest of the plant site, a Plymouth Farm building and house located approximately 1.25 miles southwest of the plant site (Residence 3), and a residence 1.5 miles southwest of the plant site (Residence 4). A residence is located 0.75 mile to the southeast of the plant site, along Christy Road (Residence 5). Other residences located within 1.5 miles of the plant site, south of SR 14 and north of the Columbia River include Residence 6, 0.5 mile east of the plant site on the south side of the BNSF railroad tracks, and Residences 7, 8, and 9, new homes south of Christy Road approximately 1.0 mile southeast of the site.

Two homes and one home under construction are located on the south side of Christy Road, approximately 1 mile southeast of the plant site. A total of nine homes are planned for construction within approximately 1 to 2 years, and would be located east of existing development in that area. The lots in this area are approximately 3 acres, and the homes are expected to be 1,800 square feet or more. Sale prices are anticipated to be from \$250,000 to \$300,000. According to Court Street Realty/Hermiston Realty, a strong market exists for these types of homes in this location (Taylor 2002).

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<sup>4</sup> Court Street Realty's office in Plymouth is not currently in use. Court Street Realty is affiliated with Hermiston Realty and is run out of the Hermiston location.

<sup>5</sup> Since no population data for the community of Plymouth is available, its population was estimated using a ratio of 2.5 persons per household.

Approximately 10 future homes are planned on the hill north of SR 14 and west of Plymouth Road, near the future commercial development discussed in Section 3.13.1.2.1 above (Economy). Permit applications have been filed for these uses, and construction is expected to occur in approximately 1 to 2 years (Taylor 2002).

### **3.13.1.3 Proposed Action**

#### **3.13.1.3.1 Plant Site**

The 44.5-acre plant site is adjacent to the northeast portion of the Williams Co. compressor station, which is located on approximately 69 acres surrounded by the 532.5-acre Plymouth Farm property (see Figure 2-3). A 200-foot-wide buffer zone would be maintained between the plant site and the compressor station, and would be used for placement of the gas pipeline. The plant site would be fenced with access easements for roads, the gas and water supply/wastewater pipelines, and transmission interconnection across Plymouth Farm.

The plant site is currently vacant. Until 2001, the plant site contained fruit trees and was used for agricultural production. In 2001, trees were removed and the land was left fallow pending replanting of another orchard crop or some other use.

No residents live on the plant site. See Section 3.13.1.2.2 (Population and Housing) above for a description of homes near the plant site.

### **Environmental Justice**

Census blocks encompassing and surrounding the plant site tend to be very low in population, although some blocks do exhibit minority characteristics. The plant site lies within census block 1207, which shares boundaries with 11 other census blocks, which are all within census tract 116 in Benton County. Of the 12 census blocks near the plant site, half are populated. In 2000, the total population was 86 people, and 50 percent of the population was minority.<sup>6</sup>

#### **3.13.1.3.2 Transmission Interconnection**

The area through which the transmission interconnection would pass was previously used for cherry and apple orchards. No employment, residential uses, population, or buildings are located within the area to be used for the transmission interconnection.

#### **3.13.1.3.3 Access Road**

The proposed access road would include 900 linear feet of existing Benton County road that extends south from SR 14. This road (Plymouth Industrial Road) continues another 300 feet as a private access to the AgriNorthwest grain facility. A new road would continue from the end of Plymouth Industrial Road westward to enter the plant site on the northeast corner. Currently, no employment or residential uses are located on this land, with the exception of possibly some temporarily located machinery storage for the corn dryer. The area was previously used for agriculture.

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<sup>6</sup> The community of Plymouth is not within any of these census blocks.

#### **3.13.1.4 Alternate 230-kV Transmission Interconnection**

The existing condition for the 230-kilovolt (kV) transmission interconnection would be the same as for the proposed transmission interconnection because the 230-kV line is located in the same physical location as the proposed 500-kV line.

#### **3.13.1.5 Alternate Benton PUD/BPA Transmission Interconnection**

The area encompassing the existing Benton Public Utilities District (PUD) transmission line does not include any employment uses or residential uses. Existing or planned homes near Christy Road are the closest residences to the PUD transmission facilities.

#### **3.13.1.6 Access Alternative**

##### **3.13.1.6.1 Alternate Construction Access Road**

To reach the alternate construction access road, workers traveling on SR 14 would turn south onto Christy Road, follow Christy Road south and then east, then veer onto farm roads just prior to where Christy Road crosses the BNSF railroad tracks. No employment uses are present along this road. One residence is located east of Christy Road, just north of where Christy Road turns east. This residence has access to Christy Road from the west and from the south. There are agricultural uses alongside Christy Road. Two residences are located approximately 1 mile southwest of the plant site and along Christy Road.

##### **3.13.1.6.2 Alternate Operation Access Road**

The alternate operation access road would include the existing Christy Road and the existing farm access road for plant site access. Agricultural uses abut Christy Road and the existing Plymouth Farm access road.

### **3.13.2 ENVIRONMENTAL CONSEQUENCES**

Potential socioeconomic impacts attributable to construction or operation of the proposed project are rated either beneficial or adverse. Adverse impacts are further rated high (significant), moderate, or low, depending on the extent to which the proposed project would (1) result in a permanent increase in site area population and demand for housing, or (2) result in local businesses experiencing interruptions in their ability to conduct business.

#### **3.13.2.1 No Action Alternative**

Under the No Action Alternative, the proposed project would not be constructed; therefore no socioeconomic impacts would occur. Other projects currently planned in the regional area could be constructed and result in increases in employment and/or population in the area depending on the type of land use. Because the area adjacent to the Williams Co. property is zoned industrial, it is possible that another industrial-use project could be constructed near the plant site in the future.

### **3.13.2.2 Proposed Action**

#### **3.13.2.2.1 Construction**

##### **Economy**

###### *Direct Impacts*

The three-county area (Benton, Franklin, and Umatilla) would experience beneficial economic impacts associated with project construction such as a temporary increase in employment and associated income and spending<sup>7</sup>. The average size of the workforce would be 130 workers, with a peak of approximately 222 workers between months 14 and 17 (September 2005 to December 2005) of the construction period. Figure 2-9 shows the total construction workforce loading over the construction period, and Table 2-4 shows the average number of workers by type that construction would require. In general, construction employment would be comprised of mechanical (48 percent), civil (20 percent), and electrical workers (20 percent); structural workers (9 percent); and operators (less than 1 percent).

Increases in spending would include construction materials and supplies purchased locally and purchases made by construction workers for food, gasoline, and lodging (for weekly commuters). Approximately \$9 million of the total \$207 million construction cost would be spent on labor (wages and benefits for workers), and the remaining \$198 million would be spent on materials, supplies, equipment, and other non-labor resources. An estimated \$25 million of the \$198 million in non-labor costs would be spent within the three-county area.

Adverse economic impacts to local businesses, such as interruptions in the ability to conduct business, are not likely to occur because no road closures or detours would be necessary for construction. Noise (discussed in Section 3.7) or other nuisance impacts from construction are not likely to result in adverse effects on the ability of Williams Co. employees or AgriNorthwest employees to conduct business. Any adverse impacts that do occur would be low-level impacts.

The applicant anticipates that approximately 65 percent of the construction worker positions (85 average, 144 at peak) would be filled from the local labor force (i.e., from Benton, Franklin and Umatilla counties) and would commute on a daily basis to the plant site. The remaining 35 percent (45 average, 78 at peak) would commute on a weekly basis and stay in the site area during the week. Benton, Franklin, and Umatilla Counties had over 5,000 people employed in the construction industry in 2000, and Benton and Franklin counties alone had over 500 employed in specific construction trades (see Section 3.13.1.1.1 Economy, Labor Force). The size of the local labor force is adequate to fill at least 65 percent of the construction worker positions. The increased demand for workers would represent a low impact on labor supply. Weekly commuters would purchase food, gas, and lodging from local suppliers, which would represent a beneficial impact.

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<sup>7</sup> Socioeconomic impacts from the Proposed Action discussed in this section include those that would be associated with the BPA transmission interconnection and the access road as well as the power plant.

### ***Indirect Impacts***

The proposed project construction would result in approximately \$10 million in indirect and induced output and \$6 million in indirect and induced value-added components, which would be comprised of personal income (approximately \$4 million), other property income (approximately \$1 million), and indirect business taxes (approximately \$500,000) (IMPLAN 2002)<sup>8</sup>. Construction would result in approximately 123 indirect and induced jobs in the local area. These effects would be due to the direct impact of project construction (employment and spending), would lag several months behind the construction period, and would likely only be sustained during the 2-year construction period. These effects would also last approximately the same length of time as construction and be beneficial to the economy.

### **Population and Housing Impacts**

Few construction workers are expected to permanently relocate to the area because there is an adequate labor force within daily or weekly commuting distance of the plant site and the construction jobs would be temporary. However, the local housing supply and market would not be stressed even if a small number of workers did choose to move to the three-county area, based on the area's housing supply and vacancy rates. An increase in weekday population associated with construction would occur in the site area, but would represent a low and less than significant impact because the increase would be temporary and generally occur during the day.

The workers who would commute on a weekly basis (45 average, 78 at peak) would likely stay in local lodging facilities. Approximately 190 hotel or motel rooms are located within 8 miles of the plant site (in Umatilla), and an additional 340 rooms and 57 RV spaces are located within 14 miles (in Hermiston), for a total of 530 rooms or spaces within 15 miles of the plant site. In addition, the Tri-Cities has 31 hotels 25 to 30 miles north of the plant site, and the City of Pendleton has over 800 hotel or motel rooms and 285 RV spaces approximately 40 miles south of the plant site. It is expected that workers who would commute on a weekly basis would be able to find temporary lodging facilities in the three-county area. No indirect impacts to population or housing would occur because construction would be temporary.

### ***Fiscal Impacts***

Upon completion of construction, the assessed value of the property parcel on which the plant site is located would increase by the estimated value of the improvements. Facility construction would add approximately \$200 million to the current assessed value. Impacts to property tax revenues are addressed in the Fiscal Impacts subsection in Section 3.13.2.2.2.

Spending and sales tax revenue increases would also occur in the three-county area due to construction, representing a beneficial economic impact. Approximately \$25 million in construction materials would be purchased within the three-county area. In addition, the construction contractor would issue resale certificates to suppliers at the time of purchase of all construction materials and supplies. Therefore, the applicant would pay the sales tax on construction materials and supplies at the time the construction contract is paid. The sales tax

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<sup>8</sup> IMPLAN economic impact modeling software was used to estimate indirect and induced economic impacts associated with the PGF. IMPLAN is based on location-specific industry-by-industry input/output tables.

revenue on the construction contract, which would include all materials and supplies regardless of where they were purchased, would accrue to Benton County. Sales tax revenue on the construction contract would be approximately \$2.5 million, based on the sales tax rate of 7.7 percent, 1.2 percent of which is returned to Benton County from the State of Washington (DOR 2002). This represents approximately half of the budgeted 2002 retail sales and use taxes in Benton County and would therefore be considered a significant beneficial impact.

In general, sales tax revenue accruing to Benton, Franklin, and Umatilla Counties could increase slightly due to increased retail sales in the area (i.e., gas, food, and lodging from weekly commuting construction workers) during construction.

As discussed in the Indirect Impacts subsection (under Construction, Economy), indirect economic impacts would include \$0.5 million in indirect business taxes.

### **3.13.2.2.2    Operation**

#### **Economy**

##### *Direct Impacts*

The Plymouth Generating Facility would be capable of operating 24 hours per day, 7 days per week and require 20 permanent employees. Employment levels, types, and shifts are shown in Table 2-5. An estimated 17 employees (85 percent) of the 20 operation employees could be hired from within the Benton, Franklin, and Umatilla Counties' labor force. This labor force (which includes the Tri-Cities) is anticipated to be large enough to accommodate the additional demand associated with PGF operation. The additional employment would be an economic benefit, while the increase in demand for workers would be a low and adverse impact.

As stated in Section 2.2.7.5, the annual cost of PGF operation would be approximately \$82 million, comprised of \$1.6 million for labor (wages and benefits for employees), and the remaining amount for fuel (\$70 million), materials, supplies, equipment, and contracted maintenance labor. The applicant anticipates that approximately \$1 million (10 percent of the total cost of materials, supplies, equipment, and contracted maintenance) would be spent locally (within Benton, Franklin, and Umatilla Counties), representing an economic benefit.

Operations employees would likely spend a small portion of their income in the three-county area during the day for food and gasoline, most likely at businesses relatively close to the plant site. Local service providers would experience increased revenues from the additional employees, which would represent an economic benefit.

##### *Indirect Impacts*

Indirect and induced beneficial effects would result from PGF operation. Indirect and induced jobs would be permanent, and indirect and induced spending would occur on an ongoing basis. PGF operation would result in approximately \$0.8 million in annual indirect and induced output, and \$0.5 million in indirect and induced value-added components, which are comprised of personal income (approximately \$0.3 million), other property income (approximately

\$0.2 million), and indirect business taxes (approximately \$0.5 million). PGF operation would result in approximately 11 indirect and induced jobs in the local area.

### **Population and Housing Impacts**

As stated above, approximately 17 of the 20 plant operation employees are expected to be hired from the three-county area, and are therefore not likely to relocate because they would be within daily commuting distance. However, assuming the three non-local employees along with a possible three other employees would move close to the site (e.g., Plymouth, Umatilla, or Hermiston), the housing supply and higher-than-average vacancy rates in the three-county area suggest that the housing supply would not likely be stressed from the additional demand. This assumption could result in a possible addition of approximately 15 people to the three-county area population, which would be a low and therefore less than significant impact in terms of total population. If families move to Plymouth, the increase in population would be more evident because Plymouth is small, but would not represent a significant impact on population or housing.

As discussed in Section 3.7 Noise, a significant impact at noise receptor R4 could result in one of three mitigation measures: (1) the existing residence at R4 (a mobile home) could be relocated or (2) removed from residential use, or (3) Plymouth Energy would obtain an easement to allow an increased noise level at R4. Implementation of the 2<sup>nd</sup> option would have the effect of removing one housing unit from the available housing supply in the project area. This would be a low impact because it represents a very small change in housing availability. Implementation of the 1<sup>st</sup> or 3<sup>rd</sup> option would represent no impact on housing.

The indirect economic activity resulting from the proposed project could result in additional population; however, the addition is not expected to be significant.

### **Fiscal Impacts**

The most notable fiscal benefit from PGF operation would be the annual property tax revenue resulting from the increase in assessed value at the plant site (see the Fiscal Impacts subsection in Section 3.13.2.2.1 above). Using the property tax rate of 0.016 percent for the plant site, the estimated increase in property tax revenue that would accrue annually to Benton County attributable to the PGF would be approximately \$3.2 million. This amount represents an increase of approximately 3 percent of the County's total property tax revenue for the 2000-2001 fiscal year (Mercer 2002).

Area businesses and Benton County would benefit in terms of spending and sales tax revenue, respectively, by PGF operation to the extent that operation employees would buy gasoline and food locally, and a portion of the supplies needed for annual PGF operation would be purchased locally.

Indirect impacts would include approximately \$0.5 million in indirect business taxes, as stated above in the Indirect Impacts subsection under Economy in this section.

## **Environmental Justice**

Potential environmental impacts associated with this project would not extend beyond the boundaries of the plant site and the infrastructure corridors with the exception of potential air, noise, traffic, and socioeconomic impacts. These types of impacts were found to be less than significant. See Sections 3.2, 3.7, 3.11, and 3.13 for more information. Socioeconomic impacts would primarily be beneficial to the area. Although half the residents located in the plant site vicinity are minority, few residents are located within 1.5 miles of the plant site, where much of the construction impact would occur. Environmental justice impacts attributable to the PGF are not anticipated.

### **3.13.2.3 Alternate 230-kV Transmission Interconnection**

Impacts attributable to the alternate 230-kV transmission interconnection would be the same as those attributable to the proposed transmission interconnection because the 230-kV line is located in the same physical location as the proposed 500-kV line.

### **3.13.2.4 Alternate Benton PUD/BPA Transmission Interconnection**

The alternate Benton PUD/BPA transmission interconnection would require that the applicant rebuild the existing Benton PUD 115-kV line, located along Christy Road, extending to the Columbia River crossing, and interconnecting to the BPA McNary Substation in McNary, Oregon. Construction and operation of the alternative Benton PUD/BPA transmission interconnection would result in beneficial economic impacts and low adverse impacts on the economy, population, and housing due to construction. Employment and costs for the alternate Benton PUD/BPA transmission interconnection are included in the estimates for the plant, discussed in Section 3.13.2.2.1, Construction, and in Section 3.13.2.2.2, Operation.

### **3.13.2.5 Access Alternative**

#### **3.13.2.5.1 Alternate Construction Access Road**

Construction and use of the alternate construction access road would result in low and less than significant direct and indirect impacts on the local economy, population, or housing. Employment and costs for the alternate construction access road are included in the estimates for the plant, discussed in Section 3.13.2.2.1, Construction, and in Section 3.13.2.2.2, Operation.

#### **3.13.2.5.2 Alternate Operation Access Road**

The existing Plymouth Farm road that provides access to the plant site from Christy Road would be improved and used during PGF operation. The road enters the plant site on the west side. Improvement and use of the alternate operation access road would result in low and less than significant direct and indirect impacts upon the local economy, population, or housing. Employment and costs for the alternate operation access road are included in the plant site estimates.

### **3.13.3 CUMULATIVE IMPACTS**

Projects in the vicinity of the PGF that are either (1) in the review process, (2) approved but not yet constructed, or (3) under construction but not completed, and have potential cumulative impacts on the socioeconomic environment when combined with the PGF include the following:

- Hermiston Power Project
- Wallula Project
- Schultz-Hanford BPA transmission line
- Wanapa Energy Center
- Motor Speedway
- Hanford Vitrification Plant

The Schultz-Hanford BPA transmission line and the Wallula Project are not analyzed for cumulative socioeconomic impacts because their construction periods were indeterminate in July 2002.

Construction of the Hermiston Power Project would overlap with PGF construction for approximately 4 months at the beginning of PGF construction. Due to its size, the Hermiston Power Project would likely require a larger workforce than the PGF. The Wanapa Energy Center, the Motor Speedway in Morrow County, Oregon, and the Hanford Vitrification Plant would all require large workforces during construction, and all three construction periods would likely overlap with the construction period of the PGF. Therefore, cumulative impacts to the regional labor force could occur during PGF construction but would be due primarily to other projects. PGF peak construction employment would represent approximately 3 percent of total construction employment in this three-county area (Benton, Franklin, and Umatilla counties).

Using the PGF peak construction workforce as a base, the combined peak workforce for all five projects would likely total more than construction employment in 2000 in the three-county area (see Section 3.13.1.1.1). All five projects are within weekly commuting distance from other labor forces and would draw from those as well. Construction projects often require commuting 2 hours or more to the job, which would result in additional labor force availability from Spokane, the Puget Sound region, and the Portland area. Peak periods of employment would vary among projects. A cumulative impact on the labor force would likely occur due to these projects and could lead to a cumulative impact on the supply of temporary and permanent housing. The contribution to this impact by the PGF would be very small (3 percent of employment) when compared to other projects in the three-county area. The three-county area would experience increased demand on the construction labor market as well as beneficial economic impacts from the temporary influx of construction workers and related spending.

### **3.13.4 SUMMARY OF IMPACTS**

Impacts attributable to the PGF would include beneficial impacts in the form of increased employment, income, spending, and tax revenue, and low adverse impacts in the form of increased demand on the labor force and construction impacts to local businesses. Adverse impacts on the local economy, population, and housing attributable to the PGF would be low and less than significant.

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### **3.13.5 MITIGATION**

Adverse impacts on the local economy, population, or housing attributable to the proposed project are not expected to be significant. Therefore, no mitigation measures would be required.

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